

**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

---

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ BLACK BORDERS
- ☐ IMAGE CUT OFF AT TOP, BOTTOM OR SIDES
- ☐ FADED TEXT OR DRAWING
- ☐ BLURRED OR ILLEGIBLE TEXT OR DRAWING
- ☐ SKEWED/SLANTED IMAGES
- ☐ COLOR OR BLACK AND WHITE PHOTOGRAPHS
- ☐ GRAY SCALE DOCUMENTS
- ☐ LINES OR MARKS ON ORIGINAL DOCUMENT
- ☐ REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY
- ☐ OTHER: \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/803,173	03/09/2001	Chong Seng Cheng	1601457-0004	9334
7590	09/20/2004			
White & Case LLP Attn: Patent Department 1155 Avenue of the Americas New York, NY 10036			EXAMINER CHOI, WOO H	
			ART UNIT 2186	PAPER NUMBER

DATE MAILED: 09/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/803,173	CHENG, CHONG SENG	
	Examiner	Art Unit	
	Woo H. Choi	2186	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 22-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 22-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/3/2003 7/6/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

#### *Priority*

1. If applicant desires priority under 35 U.S.C. 120 based upon a previously filed application, specific reference to the earlier filed application must be made in the instant application. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications. This should appear as the first sentence of the specification following the title, preferably as a separate paragraph unless it appears in an application data sheet. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. \_\_\_\_\_" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time

Art Unit: 2186

period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

### *Specification*

2. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program

Art Unit: 2186

listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or

REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)

(e) BACKGROUND OF THE INVENTION.

(1) Field of the Invention.

(2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.

(f) BRIEF SUMMARY OF THE INVENTION.

(g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).

(h) DETAILED DESCRIPTION OF THE INVENTION.

(i) CLAIM OR CLAIMS (commencing on a separate sheet).

(j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

*Claim Rejections - 35 USC § 112*

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 22 – 28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5. With respect to claim 22, the specification as originally filed does not support the limitation "a USB plug integrated into the unitary portable data storage device without an

Art Unit: 2186

intervening cable capable of coupling portable data storage device directly to a USB socket on a computer”. Closest support for the limitation can be found in figure 1, element 1, and figure 2, step 20 and their corresponding descriptions in the specifications. However, while the specification discloses a USB plug and that “the plug 1 of the device 10 is plugged into 20 to a USB socket on the computer” (specification page 5, lines 18 – 19), it does not disclose that the USB plug 1 of the device is capable of coupling **directly without an intervening cable** to a USB socket on a computer. The specification is silent as to the method of plugging the device to a socket on a computer. Directly coupling in a manner claimed requires that the plug and the socket be compatible both electrically and physically. Physical characteristics of the plug and the socket are not disclosed at all. Applicant’s argument that “the specification never mentions using a cable in conjunction with the portable data storage device” is not persuasive, as the mere absence of a positive recitation is not a basis for an exclusion.

The specification as originally filed does not support the limitation “a USB plug integrated into the **unitary** portable data storage device”. This limitation has been introduced specifically to avoid a prior art reference applied in the previous rejection that discloses a two-piece construction of applicant’s claimed device. A limitation that applicant regards as patentably distinct must be supported either specifically or inherently in the specification. There’s neither specific nor inherent support for this **unitary** construction of the claimed device in the specification.

Art Unit: 2186

The specification as originally filed does not support the limitation “said memory being **non-removable** from the unitary portable data storage device”. Again, this limitation has been added specifically to avoid a prior art reference applied in the previous rejection that discloses applicant’s claimed device with removable memory. A limitation that applicant regards as patentably distinct must be supported either specifically or inherently in the specification.

---

There’s neither specific nor inherent support for non-removable fixed memory construction of the claimed device in the specification.

6. Claims 23 – 28 contain the deficiencies of their parent claim as discussed above.

### *Claim Rejections - 35 USC § 102*

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 22 – 24, and 26 – 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Miller (US Patent No. 6,-38,320).



Art Unit: 2186

9. With respect to claims 22 – 24, and 28, Miller discloses a unitary portable data storage device (figure 3) comprising:

a USB plug (figure 3, 48) integrated into the unitary portable data storage device without an intervening cable capable of coupling the unitary portable data storage device directly to a

---

USB socket on a computer;

a single interface (figure 3, interface between the plug 48 and the controller 42), said interface allowing the unitary portable data storage device to communicate via the USB protocol and being coupled to the USB plug;

a memory controller (42); and

a non-volatile solid-state memory (46), said memory being non-removable from the unitary portable data storage device;

the memory controller being coupled between the interface and the memory to control the flow of data between the memory and the USB plug (figure 3, col. 2 line 59 – col. 4, line7).

10. With respect to claim 26, the memory controller comprises a micro-controller (col. 2, line 65).

11. With respect to claim 27, the micro-controller includes a read-only memory which stores a program to control the operation of the micro-controller (col. 3, lines 13 – 15).

12. Claims 22 – 24, and 26 – 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Gilbert (US Patent No. 6,457,099).

Gilbert discloses a unitary portable data storage device (figure 2, 100) comprising:  
a USB plug integrated into the unitary portable data storage device without an  
intervening cable capable of coupling the unitary portable data storage device directly to a USB  
socket on a computer (col. 7, lines 11 – 30, just like applicant's device, Gilbert's device plugs  
into a computer, see lines 23 – 24);

a single interface, said interface allowing the unitary portable data storage device to  
communicate via the USB protocol and being coupled to the USB plug (a USB interface is  
required for the embodiment of Gilbert's device) ;

a memory controller (figure 1, 102, 104);

and a non-volatile solid-state memory (figure 1, 106, 108, 110, 112, see also col. 3, lines  
42 – 47 and col. 4, lines 16 – 22), said memory being non-removable from the unitary portable  
data storage device;

the memory controller being coupled between the interface and the memory to control the  
flow of data between the memory and the USB plug.

### *Claim Rejections - 35 USC § 103*

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all  
obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Kondo *et al.* (US Patent No. 6,786,417, hereinafter "Kondo").

---

Miller discloses all of the limitations of the parent claim as discussed above. However, Miller does not specifically disclose a manually operated switch movable between a first position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented. On the other hand, Kondo discloses a flash memory device with a manually operated switch movable between a first position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented (figures 3 and 4, element 6 activates the switch, col. 4, line 65 – line 3).

It would have been obvious to one of ordinary skill in the art, having the teachings of Miller and Kondo before him at the time the invention was made, to use the accidental erasure prevention teachings of the compact portable flash memory card of Kondo in the compact portable flash memory card of Miller, in order to prevent accidental erasures of flash memory content (Kondo, col. 1, line 66 – col. 2, line 1).

15. Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gilbert in view of Kondo.

Gilbert discloses all of the limitations of the parent claim as discussed above. However, Gilbert does not specifically disclose a manually operated switch movable between a first

Art Unit: 2186

position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented. On the other hand, Kondo discloses a flash memory device with a manually operated switch movable between a first position in which writing of data to the memory is enabled, and a second position in which writing of data to the memory is prevented (figures 3 and 4, element 6 activates the switch, col. 4, line 65 – line 3).

---

It would have been obvious to one of ordinary skill in the art, having the teachings of Gilbert and Kondo before him at the time the invention was made, to use the accidental erasure prevention teachings of the compact portable non-volatile memory card of Kondo in the compact portable non-volatile memory card of Miller, in order to prevent accidental erasures of memory content (Kondo, col. 1, line 66 – col. 2, line 1).

### ***Response to Arguments***

16. Applicant's arguments filed May 20, 2004, have been fully considered but they are not persuasive.

Applicant's arguments regarding the rejections under 35 U.S.C. 112, first paragraph, have been addressed above.

Applicant's argument that Miller's device is not a data storage device as claimed because "the *Miller* security key device is designed to serve a fundamentally different purpose than data storage, namely: access control for a computer with an external bus" is not persuasive.

Art Unit: 2186

Applicant seems to be arguing that the instant invention is patentably distinct from Miller's device because their intended uses are different. However, regardless of what the devices are used for, Miller's device anticipates Applicant's invention since it teaches every single limitation that is claimed.

---

Applicant offers a similar argument with respect to the Gilbert reference. Applicant's statement that "as *Gilbert* itself states, the PDAC is designed to be a hardware accelerator, which is a fundamentally different apparatus than a unitary portable data storage device" does not change the fact the Gilbert anticipates every single limitation that is claimed as discussed above. Mere fact that Applicant's invention has less functionality than Gilbert's PDAC does not make it patentably distinct.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2186

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Woo H. Choi whose telephone number is (703) 305-3845. The examiner can normally be reached on M-F, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on (703) 305-3821. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*whc*  
whc

September 14, 2004

  
MATTHEW KIM  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100